

Digital to Analogue Converter, 16 bit, 50 MSPS, Parallel,  $\pm 4.75V$  to  $\pm 5.25V$ , SSOP, 28 Pins

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	28-SSOP
Product Type	Data Conversion ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC1668IG#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC1666/LTC1667/LTC1668 are 12-/14-/16-bit, 50MSPS differential current output DACs implemented on a high performance BiCMOS process with laser trimmed, thin-film resistors. The combination of a novel current-steering architecture and a high performance process produces DACs with exceptional AC and DC performance. The LTC1668 is the first 16-bit DAC in the marketplace to exhibit an SFDR (spurious free dynamic range) of 87dB for an output signal frequency of 1MHz.

Operating from  $\pm 5V$  supplies, the LTC1666/LTC1667/LTC1668 can be configured to provide full-scale output currents up to 10mA. The differential current outputs of the DACs allow single-ended or true differential operation. The  $-1V$  to  $1V$  output compliance of the LTC1666/LTC1667/LTC1668 allows the outputs to be connected directly to external resistors to produce a differential output voltage without degrading the converter's linearity. Alternatively, the outputs can be connected to the summing junction of a high speed operational amplifier, or to a transformer.

The LTC1666/LTC1667/LTC1668 are pin compatible and are available in a 28-pin SSOP and are fully specified over the industrial temperature range.

## Features

50MSPS Update Rate

Pin Compatible 12-Bit, 14-Bit and 16-Bit Devices

High Spectral Purity: 87dB SFDR at 1MHz f<sub>OUT</sub>

5pV-s Glitch Impulse

Differential Current Outputs

20ns Settling Time

Low Power: 180mW from ±5V Supplies

TTL/CMOS (3.3V or 5V) Inputs

Small Package: 28-Pin SSOP

## Application

Cellular Base Stations

Multicarrier Base Stations

Wireless Communication

Direct Digital Synthesis (DDS)

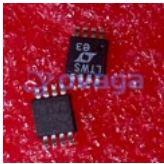
xDSL Modems

Arbitrary Waveform Generation

Automated Test Equipment

Instrumentation

## Related Products



### [LTC1860IMS8#PBF](#)

Analog Devices, Inc  
MSOP-8



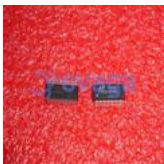
### [LT1171CQ](#)

Analog Devices, Inc  
TO-263



### [LTC2485IDD#PBF](#)

Analog Devices, Inc  
DFN-10



### [LTC2418IGN#PBF](#)

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SSOP28



### [LTC2351IUH-14#PBF](#)

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QFN-32



### [LTC2600CGN#PBF](#)

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SSOP16



### [LTC2642CMS-16#PBF](#)

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10MSOP



### [LTC1865AIMS#PBF](#)

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MSOP-1